

## Patent claims

- Sub 47
1. A vacuum contactor having a contactor housing (1),  
a drive coil (2), an armature (3), an operating element  
5 (4) and at least one vacuum contact,  
- with the drive coil (2) deflecting the armature  
(3) from an armature rest position (AR) to an  
armature operating position (AB) when a pull-in  
current (IA) is applied,  
10 - with the deflection of the armature (3) causing  
the operating element (4) to be deflected from an  
element rest position (ER) to an element operating  
position (EB), and  
- with the deflection of the operating element (4)  
15 resulting in operation of the at least one vacuum  
contact,  
characterized  
in that, when the armature (3) is deflected from the  
armature rest position (AR) to the armature operating  
20 position (AB), the armature (3) first of all passes  
through an initial movement distance (sV), and then  
passes through a driving movement distance (sM), and in  
that the operating element (4) is deflected by the  
armature (3) only while the latter is passing through  
25 the driving movement distance (sM).
2. The vacuum contact as claimed in claim 1,  
characterized  
in that the ratio of the initial movement distance (sV)  
30 to the driving movement distance (sM) is between 1:3  
and 3:1.
3. The vacuum contactor as claimed in claim 2,  
characterized  
35 in that the ratio of the initial movement distance (sV)  
to the driving movement distance (sM) is between 2:3  
and 3:2.

4. The vacuum contactor as claimed in claim 1, 2 or 3, characterized in that the armature (3) is deflected by the drive coil (2) against an initial movement force (FV) while it is passing through the initial movement distance (sV), and  
5 against a driving force (FM)